

IN THE CLAIMS

1. (Currently Amended) A ~~n~~ nested implant comprising a body having a substantially tubular inner member and at least one substantially tubular outer member, each member being formed from a bone from a different region of the body and being formed with an exterior surface and an opening defining an interior surface, wherein the exterior surface of each inner member annularly contacts the interior surface of no more than one other outer member.

2. (Previously Presented) The implant of claim 1, further comprising a core disposed in the inner member and formed from a bone other than the bones of the members.

3. (Previously Presented) The implant of claim 2, wherein the core is formed of cancellous bone and at least one member is formed of cortical bone.

4. (Previously Presented) The implant of claim 2, wherein at least one member is formed of cancellous bone and the core is formed of cortical bone.

5. (Previously Presented) The implant of claim 2, wherein the bones comprise at least one of the group comprising an autograft, allograft, and xenograft bone tissue.

6. (Original) The implant of claim 5, wherein the bone tissue of at least one bone is partially demineralized or demineralized.

7. (Previously Presented) The implant of claim 2, wherein the body comprises a cross-section of the members and the core, the cross-section including at least a portion of each member and the core.

8. (Previously Presented) The implant of claim 7, wherein the members and core are coupled together with at least one fastener.

9. (Previously Presented) The implant of claim 8, wherein the at least one fastener is selected from at least one of the group comprising a screw, key, pin, peg, rivet, cotter, nail, spike, bolt, stud, staple, boss, clamp, clip, dowel, stake, hook, anchor, tie, band, crimp, and wedge.

10. (Previously Presented) The implant of claim 8, wherein the at least one fastener intersects each of the members and the core.

11. (Previously Presented) The implant of claim 7, wherein at least two of the members and the core are bonded together with a bonding agent.

12. (Previously Presented) The implant of claim 2, wherein at least one of the inner member, an outer member, and the core is at least partially dehydrated to fit against a surrounding mating surface.

13. (Previously Presented) The implant of claim 2, wherein at least one of the inner member, an outer member, and the core is at least partially dehydrated to fit within a surrounding inner member or outer member having a greater moisture content.

14. (Previously Presented) The implant of claim 1, wherein contact surfaces of adjacent members are machined surfaces so that the contour of the contacting surfaces is about the same.

15. (Previously Presented) The implant of claim 14, wherein the machined surfaces permit press-fitting of one member into another member.

16. (Previously Presented) The implant of claim 1, wherein the bones are selected from at least one of the group comprising a femur, tibia, humerus, fibula, ulna, and radius.

17. (Previously Presented) The implant of claim 1, further comprising at least one supplemental member having an interior surface and an exterior surface, wherein the exterior surface of each supplemental member contacts the interior surface of no more than one other member and the interior surface of each supplemental member contacts the exterior surface of no more than one other member, wherein the at least one supplemental member is formed from a material selected from metals, alloys, ceramics, polymers, and composites.

18. (Previously Presented) The implant of claim 1, wherein at least one member is packed with bone growth materials.

19. (Previously Presented) The implant of claim 1, wherein at least one member further comprises alignment indicia.

20. (Original) The implant of claim 1, wherein the exterior surface is spaced from a portion of the interior surface.

21. (Currently Amended) A ~~an~~ nested implant comprising a body formed from a core and a plurality of substantially tubular members, wherein each member has an outer tubular surface and an opening defining an inner tubular surface, the outer surface of the first member has about the same contour as the inner surface of the second member so that the first member may be received within the second member, the core being sized and configured to be received within the opening formed in the first member.

22. (Previously Presented) The implant of claim 21, wherein the core is formed from a bone other than the bones of the other members.

23. (Previously Presented) The implant of claim 22, wherein the core is formed of cancellous bone and at least one member is formed of cortical bone.

24. (Previously Presented) The implant of claim 22, wherein at least one member is formed of cancellous bone and the core is formed of cortical bone.

25. (Previously Presented) The implant of claim 22, wherein the bones comprise at least one of the group comprising an autograft, allograft, and xenograft bone tissue.

26. (Original) The implant of claim 25, wherein the bone tissue of at least one bone is partially demineralized or demineralized.

27. (Previously Presented) The implant of claim 22, wherein the members and core are coupled together with at least one fastener.

28. (Previously Presented) The implant of claim 27, wherein the at least one fastener is selected from at least one of the group comprising a screw, key, pin, peg, rivet, cotter, nail, spike, bolt, stud, staple, boss, clamp, clip, dowel, stake, hook, anchor, tie, band, crimp, and wedge.

29. (Previously Presented) The implant of claim 27, wherein the at least one fastener intersects each of the members and the core.

30. (Previously Presented) The implant of claim 22, wherein the members and core are bonded together with a bonding agent.

31. (Previously Presented) The implant of claim 22, wherein at least one of the first member, second member, and core is at least partially dehydrated to fit against a surrounding mating surface.

32. (Previously Presented) The implant of claim 22, wherein at least one of the first member, second member, and core is at least partially dehydrated to fit within a surrounding first member or second member.

33. (Previously Presented) The implant of claim 21, wherein contact surfaces of adjacent members are machined surfaces so that the contour of the contacting surfaces is about the same.

34. (Previously Presented) The implant of claim 33, wherein the machined surfaces permit press-fitting of one member into another member.

35. (Previously Presented) The implant of claim 21, wherein at least two of the members selected from the core, the inner tubular member, and the outer tubular member are formed from bone selected from different regions of the body, and wherein the bones are selected from at least one of the group comprising a femur, tibia, humerus, fibula, ulna, and radius.

36. (Previously Presented) The implant of claim 21, further comprising at least one supplemental member having an interior surface and an exterior surface, wherein the exterior surface of each supplemental member contacts the interior surface of no more than one other member and the interior surface of each supplemental member contacts the exterior surface of no more than one other member, wherein the at least one supplemental member is formed from a material selected from metals, alloys, ceramics, polymers, and composites.

37. (Previously Presented) The implant of claim 21, wherein at least one member is packed with bone growth materials.

38. (Previously Presented) The implant of claim 21, wherein at least one member further comprises alignment indicia.

39. (Original) The implant of claim 21, wherein the exterior surface is spaced from a portion of the interior surface.

40. (Currently Amended) A ~~an~~ nested implant comprising a plurality of substantially circular members, each member having a hole defining an opening, the implant further including a core sized and configured to fit within the innermost circular member, wherein the members are formed from at least two different bones selected from the group comprising a femur, tibia, humerus, fibula, ulna, and radius.

41. (Currently Amended) A ~~an~~ nested implant comprising a substantially circular inner member and at least one substantially circular outer member, wherein the inner member is sized and configured to fit within an opening formed in the outer member, when coupled, the inner and outer members forming at least one securing region, the implant further including at least one insertable securing element adapted for placement in the at least one securing region, wherein the implant is formed from at least two different bones selected from the group comprising a femur, tibia, humerus, fibula, ulna, and radius.

42. (Original) The implant of claim 41, wherein the at least one securing region is a recess or hole.

43. (Previously Presented) The implant of claim 42, wherein the insertable securing element is selected from at least one of the group comprising a screw, key, pin, peg, rivet, cotter, nail, spike, bolt, stud, staple, boss, clamp, clip, dowel, stake, hook, anchor, tie, band, crimp, and wedge.

44. (Previously Presented) The implant of claim 42, wherein each layer is formed from a different bone selected from at least one of the group comprising a femur, tibia, humerus, fibula, ulna, and radius.

45. (Original) The implant of claim 44, wherein the core is formed of cancellous bone and at least one member is formed of cortical bone.

46. (Previously Presented) The implant of claim 45, wherein the layers comprise at least one of the group comprising an autograft, allograft, and xenograft bone tissue.

47. (Original) The implant of claim 42, wherein the bone tissue of at least one bone is partially demineralized or demineralized.

48. (Original) The implant of claim 42, wherein the layers are bonded together with a bonding agent.

49. (Original) The implant of claim 42, wherein a first layer is at least partially dehydrated to fit against at least one other layer.

50. (Original) The implant of claim 42, wherein adjacent layers are provided with mutually contacting surfaces that are machined to have about the same contour.

51. (Original) The implant of claim 42, wherein the contacting surfaces of adjacent layers are press-fit together.

52. (Previously Presented) The implant of claim 42, further comprising at least one supplemental layer coupled to at least one of the layers of bone components, wherein the at least one supplemental member is formed from a material selected from at least one of the group comprising metals, alloys, ceramics, polymers, and composites.

53. (Original) The implant of claim 41, wherein the implant further comprises a chamber packed with bone growth materials.

54. (Original) The implant of claim 41, wherein at least one layer further comprises alignment indicia.

55. (Cancelled).

56. (Currently Amended) A ~~an~~ nested implant comprising a body having two outer annular members and at least one inner annular member, where at least one of the outer and inner annular members is formed from bone and the outer annular members are coupled together to define a central opening for receiving the at least one inner member.

57. (Previously Presented) The implant of claim 56, wherein each annular member has at least one surface that is press-fit with the surface of another annular member.

58. (Previously Presented) The implant of claim 57, wherein the outside diameter of the outer annular members is smaller than the outside diameter of the at least one inner annular member.

59. (Previously Presented) The implant of claim 57, wherein the implant is symmetrical about an innermost annular member, the diameter of the implant progressively decreasing from the innermost annular member to each outer annular member.

60. (Previously presented) The implant of claim 57, wherein the central opening is packed with at least one of bone material and bone inducing substances.

61. (Previously Presented) The implant of claim 57, wherein at least one annular member is formed of cancellous bone and at least one annular member is formed of cortical bone.

62. (Previously Presented) The implant of claim 57, wherein the annular member bones comprise at least one of the group comprising an autograft, allograft, and xenograft bone tissue.

63. (Original) The implant of claim 62, wherein the bone tissue of at least one bone is partially demineralized or demineralized.

64. (Previously Presented) The implant of claim 57, wherein a plurality of annular members are coupled together with at least one fastener.

65. (Previously Presented) The implant of claim 64, wherein the at least one fastener is selected from a screw, key, pin, peg, rivet, cotter, nail, spike, bolt, stud, staple, boss, clamp, clip, dowel, stake, hook, anchor, tie, band, crimp, and wedge.

66. (Previously Presented) The implant of claim 57, wherein a plurality of annular members are bonded together with a bonding agent.

67. (Previously Presented) The implant of claim 57, wherein at least one of the annular members is at least partially dehydrated to fit against a surrounding mating surface.

68. (Previously Presented) The implant of claim 57, wherein at least one of the annular members is at least partially dehydrated to mate with another annular member.

69. (Previously Presented) The implant of claim 21, wherein contacting surfaces of adjacent annular members are machined surfaces so that the contour of the contacting surfaces is about the same.

70. (Previously Presented) The implant of claim 69, wherein the machined surfaces permit press-fitting of the inner annular member into the central opening formed by the outer annular members.

71. (Previously Presented) The implant of claim 56, wherein the annular member bones are selected from at least one of the group comprising a femur, tibia, humerus, fibula, ulna, and radius.

72. (Previously Presented) The implant of claim 56, wherein the annular members are non-circular.

73. (Previously Presented) The implant of claim 72, wherein the annular members are generally oblong.

74. (Previously Presented) The implant of claim 56, further comprising at least one supplemental annular member coupled to at least one of the annular members formed from bone, wherein the at least one supplemental member is formed from a material selected from metals, alloys, ceramics, polymers, and composites.

75. (Previously Presented) The implant of claim 56, wherein at least one annular member further comprises alignment indicia.

76. (Previously Presented) The implant of claim 56, wherein adjacent surfaces of at least two annular members do not completely contact each other.

77. (Currently Amended) A nested implant comprising a body having at least two ring-shaped members formed from bone, wherein the innermost ring-shaped member has a longitudinal axis and an outer diameter, the outermost ring-shaped member has a longitudinal axis, an outer diameter, and a central opening defining an inner surface, the inner surface is sized and configured to receive the innermost ring-shaped member so that the longitudinal axis of the innermost ring-shaped member coincides with the longitudinal axis of the outermost ring-shaped member when the innermost ring-shaped member is received within the outermost ring-shaped member.

78. (Previously Presented) The implant of claim 77, wherein the ring-shaped members have surfaces that mate and press-fit together.